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**REMARKS**

The Office Action mailed July 8, 2003 has been reviewed and carefully considered. Claims 1-4 and 7 have now been canceled. Claims 8-19 have now been added and are pending in this case, with claims 8 and 16 being the independent claims. Claims 15, 16 and 19 have been amended. Reconsideration of the above-identified application, as herein amended and in view of the following remarks, is respectfully requested.

**OBJECTION TO THE SPECIFICATION:**

The specification stands objected to for lack of clarity in setting forth the relationship between FIGs. 3 and 6.

This relationship is believed to have been stated clearly in at least lines 15 to 17 of page 10 of the specification. Nevertheless, the "Brief Description of the Drawings" has now been amended for clarity in reiterating that relationship. Regarding the direction of light leaving the lens field 32, it is evident from a comparison of FIGs. 3 and 6, that the adjustment of the distance between the lenses 34, 35 causes the change in light direction (specification, page 10, lines 12-15).

**CLAIM REJECTIONS UNDER 35 U.S.C. 112, FIRST PARAGRAPH**

Claim 14 stands rejected for lack of support in the disclosure on the subject of how slit inner walls could rectify light beams.

Claim 14, however, is not directed to rectifying light by means of slit inner walls. Claim 14 features “the updating step further rectifying said beams . . .” The “updating step” is recited in base claim 8, and features “updating said positioning so as to rectify said beams into parallelism.” It is therefore the updating of “said positioning,” rather than the inner walls of a slit, that rectifies beams into parallelism.

Claim 16 stands rejected for lack of support in the specification on how to “physically ‘adjust’ the width of the slit pattern.”

Claim 16 is not, however, directed to such an effort, but instead recites “adjusting the mask width.” This “adjusting” (specification, page 12, line 22: “adjusting”) is supported in the disclosure (e.g., page 12, line 21 to page 13, line 2), as would be understood by one of ordinary skill in the art.

CLAIM OBJECTIONS:

(1) Claims 8 and 16 stand objected to on the basis of it not being clear how the grating pattern relates to the optical fiber grating. The last element of each of claims 8 and 16 recites “producing said light in a path in a path from said light source to the plural lenses, to the amplitude mask, and to said optical fiber to fabricate said apodized optical fiber grating.” Earlier in both claims, the providing step recites “an amplitude mask with a slit pattern,” and the positioning step recites “so that light from the light source traveling through the plural lenses and then through the slit pattern to

reach the fiber would produce desired spacings and widths of a grating pattern.” The applicants submit that the scope of the claim with respect to the grating pattern and with respect to optical fiber grating for each of claims 8 and 16 is clear to one of ordinary skill in the art.

The examiner's focus during examination of claims for compliance with the requirement for definiteness of **35 U.S.C. 112**, second paragraph is whether the claim meets the threshold requirements of clarity and precision, not whether more suitable language or modes of expression are available. When the examiner is satisfied that patentable subject matter is disclosed, and it is apparent to the examiner that the claims are directed to such patentable subject matter, he or she should allow claims which define the patentable subject matter with a reasonable degree of particularity and distinctness. Some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire. MPEP 2173.02.

In this regard, applicant submits that claims 8 and 16 are worded precisely, and certainly with the “reasonable degree of particularity and distinctness” mandated in MPEP 2173.02. Although specifically directed to claim rejections, the teachings of MPEP 2173.02 apply as well to claim objections.

If, on the other hand, item 8(1) of the Office Action is suggesting that additional claim limitations be added due to a perception that the applicants are “claiming broadly,” the cure for such discomfort is to find relevant prior art.

(2) Claim 16 stands objected to as “confusing and indefinite” for purportedly failing to establish a connection between the two recitations of the phrase “a

grating pattern.”

In accordance with prevailing standards of patent claim drafting, however, the word “said” is utilized to precede a word or phrase with antecedent basis in the claim. Therefore, for example, if the claim recites “a widget with a gizmo” and also recites “a respective widget,” one can unambiguously refer later in the claim to “said widget with a gizmo.” An analogous situation is found in claim 16 of the present invention. Accordingly, proper antecedent basis exists in claim 16 for the phrase “said spacings and widths of a grating pattern.”

Nevertheless, to move forward prosecution, the adjusting step of claim 16 has now been amended to recite, “adjusting the mask width to reduce differences as to spacing, and as to width, among said spacings and widths of the grating pattern.”

Reconsideration and withdrawal of the objection is respectfully requested.

(3) Claims 15 and 19 stand objected to based on the recitation of the word “substantially.” This word has now been deleted. Support for the amendment of claims 15 and 19 is found in the specification (e.g., page 2, lines 4-6).

CLAIM REJECTIONS UNDER 35 U.S.C. 103(a):

Claims 8-19 stand rejected under 35 U.S.C. 103(a) as unpatentable over U.S. Patent No. 6,694,075 to Bhatia et al. (“Bhatia”) in view of U.S. Patent No. 5,604,829 to Bruesselbach.

Claim 8 recites:

positioning the source, fiber, mask and plural lenses in alignment along an optical axis, with the mask being perpendicular to the optical axis, so that light from the light source traveling through the plural lenses and then through the slit pattern to reach the fiber would produce desired spacings and widths of a grating pattern on the fiber;  
updating said positioning so as to rectify said beams into parallelism with said optical axis to conform said spacings and widths of the grating pattern to the spacings and widths of the slit pattern

Item 10 of the Office Action appears to rely on the mere existence of the Bhatia collimator 102 as disclosure of the updating step of claim 8.

In particular, although Bhatia discloses that the collimator 102 collimates (col. 5, line 9(10): “collimates”), and that the beam 94 remains collimated (col. 7, line 20: “remains collimated”), the applicants fail to find any hint or suggestion of “updating said positioning so as to rectify said beams into parallelism with said optical axis” much less doing so “to conform said spacings and widths of the grating pattern to the spacings and widths of the slit pattern.”

Bruesselbach, though relating to the formation of an optical grating, cannot make up for the deficiencies in Bhatia.

For at least this reason, the proposed combination of prior art references fails to render obvious the invention as recited in claim 8.

Regarding claim 16, the Office Action seems not to have even ventured a

Amendment  
Serial No. 09/750,576

Docket No. 5000-1-181.

reason why anything in the cited references relates to claim 16.

In particular, none of the cited references, alone or in combination, discloses, suggests or features “adjusting the mask width to reduce differences as to spacing, and as to width, among said spacings and widths of the grating pattern” as explicitly required by the language of claim 16. For at least this reason, claim 16 is not rendered obvious by the cited references.

As to the other claims, each depends from a base claim and is deemed to be patentable over the cited references at least due to its dependency, although each warrants further consideration based on its additional, individual merits.

In view of the foregoing amendments and remarks, it is believed that this application is now in condition for allowance. The Examiner is invited to contact the undersigned in the event of any perceived outstanding issues so that passage of the case to issue can be effected without the need for a further Office Action.

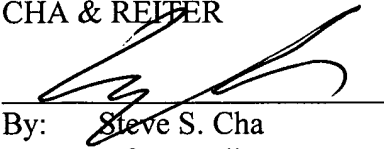
Amendment  
Serial No. 09/750,576

Docket No. 5000-1-181.

In the event that any additional fee is required to continue the prosecution of this Application as requested, please charge such fee to Deposit Account No. 502-470.

Respectfully submitted,

CHA & REITER

  
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Date: June 8, 2004

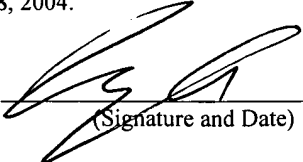
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